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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,530	03/15/2004	Michael Plotkin	200316672UGH	1319

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EXAMINER

KHATRI, PRANAV V

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/800,530

Applicant(s)

PLOTKIN ET AL.

Examiner

Pranav V. Khatri

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/15/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Restriction

Applicant's restriction requirement of claims 1-21 is withdrawn due to the claims being amended.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takada et al. (US Patent No. 6,445,483) in view of Saito et al. (US Patent Application Publication 2001/0035999 A1).

Regarding claims 1 and 11, the method of determining a start scan time in a laser scanning system is inherently met by the disclosure of the prior art. Takada et al. discloses a scanning reflector (see Takada et al. Fig 29 numeral 3); at least one reflector (11) positioned to receive light from the source (1) that has been reflected from the scanning reflector (3) back toward the scanning reflector (3); a detector (93) adapted to detect light reflected at least twice from the scanning reflector (beam a and b). Takada et al. lacks the teaching of a laser beam source modulated by data; and a

controller adapted to control the timing of the data, including a start scan of the scanning system, responsive to the detection of light by the detector.

However, Saito et al. teaches of a laser beam source modulated by data (see Page 3 Paragraph 0029 Lines 2-5); and a controller (Fig 1 Numeral 30) adapted to control the timing of the data, including a start scan of the scanning system, responsive to the detection of light by the detector.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the scanning device of Takada et al. with a scanning device of Saito et al. that has a laser beam modulated and a controller for timing for the purpose of modulating or changing beams intensity and having a controller for controlling a start of scan.

Regarding claim 12 and 1, the method of determining a start scan time in a laser scanning system is inherently met by the disclosure of the prior art. Takada et al. in view of Saito et al. discloses wherein the at least one reflector (see Takada et al. Fig 29 numeral 3) comprises a plurality of reflectors (4 and 5), positioned such that the beam is reflected from the reflector more than twice before being detected (beam a and b).

Regarding claims 2 and 7, the method of determining a start scan time in a laser scanning system is inherently met by the disclosure of the prior art. Takada et al. discloses the claimed invention as set forth above except wherein transmitting the laser beam toward the scanning reflector comprises transmitting a beam separate from a beam used for conveying data in the scanning system.

However, Saito et al. teaches wherein transmitting the laser beam toward the scanning reflector comprises transmitting a beam separate from a beam used for conveying data in the scanning system (Fig 1 beams 21, 22 and 23)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the scanning device of Takada et al. with a scanner of Saito et al. for the purpose of having a multi beam scanner that has different beams with different intensities or data information.

Regarding claim 3, the method of determining a start scan time in a laser scanning system is inherently met by the disclosure of the prior art. Takada et al. in view of Saito et al. discloses the claimed invention except for wherein detecting the laser beam comprises detecting by a deflector adjacent a source of the laser beam.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a detector adjacent a laser source instead of having it a further distance as shown in Fig 29 of the reference, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 4, the method of determining a start scan time in a laser scanning system is inherently met by the disclosure of the prior art. Takada et al. in view of Saito et al. discloses the claimed invention except for wherein detecting the laser beam comprises detecting by a deflector adjacent a source of the laser beam.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a detector adjacent a laser source instead of having it a

further distance as shown in Fig 29 of the Takada et al. reference, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claims 17 and 5, the method of determining a start scan time in a laser scanning system is inherently met by the disclosure of the prior art. Takada et al. in view of Saito discloses the claimed invention except for wherein the laser beam source and the detector are included together in a single housing not encompassing the scanning reflector.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a detector and a laser source in a different housing than the reflector or have them in the same housing, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claims 18 and 1, the method of determining a start scan time in a laser scanning system is inherently met by the disclosure of the prior art. Takada et al. in view of Saito et al. discloses a laser beam source (see Takada et al. Fig 29 numeral 1); a scanning reflector (3); a detector (93) adapted to detect light reflected from the scanning reflector; and a controller (see Saito et al. Fig 1 Numeral 30) adapted to control the timing of the scanning system, including a start of scan of the scanning system, responsive to the detection of light by the detector (see Saito et al. Page 3 Paragraph 0033 Lines 11-18). Takada et al. in view of Saito et al. lacks the teaching of a mounting element having the laser beam source and the detector but not the scanning reflector mounted therein or thereon.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a detector and a laser source in a different housing than the reflector or have them in the same housing, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claims 9, 10, 13, 14 and 20, the method of determining a start scan time in a laser scanning system is inherently met by the disclosure of the prior art, Takada et al. in view of Saito et al. discloses wherein the scanning reflector comprises a rotating polygon reflector (see Takada et al. Abstract Lines 9-14).

Regarding claims 8, 15, 16 and 19, the method of determining a start scan time in a laser scanning system is inherently met by the disclosure of the prior art. Takada et al. in view of Saito et al. discloses wherein the scanning reflector comprises an oscillating reflector (see Takada et al. in another embodiment a galvano-mirror Col 27 Lines 34-40).

Regarding claim 21, Takada et al. in view of Saito et al. discloses an additional reflector (see Takada et al. Fig 29 Numeral 11) adapted to reflect light from the source, which was reflected from the scanning reflector (3), back onto the scanning reflector (numeral 3 as seen in Fig 29).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takada et al. (US Patent No. 6,445,483) in view of Saito et al. (US Patent Application Publication 2001/0035999 A1) and in further view of Suzuki et al. (US Patent No. 5,359,407).

Regarding claim 6, the method of determining a start scan time in a laser scanning system is inherently met by the disclosure of the prior art. Takada et al. in

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view of Saito et al. discloses the claimed invention as set forth above except wherein the separate beams are generated by a single source and are split on their way to the scanning reflector.

However, Suzuki et al. discloses wherein the separate beams are generated by a single source and are split on their way to the scanning reflector (see Suzuki et al. Fig 5 Numeral 120 splits the three beams from light source 100).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the scanning apparatus of Takada et al. in view of Saito et al. with a scanning apparatus that has a beam splitter of Suzuki et al. for the purpose of increasing the number of beams being reflected off the polygon mirror or reflector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pranav V. Khatri whose telephone number is 571-272-8311. The examiner can normally be reached on M-F, 8:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pranav Khatri
Examiner
11/01/2005



EUNHA P. CHERRY
PRIMARY EXAMINER